

CLAIMS:

What is claimed:

1. A communication network comprising:

a processing system configured to process one of a Signaling System #7 (SS7) signaling message and a Q.931 signaling message for a call to select packet routing information for the call and to transfer a control message indicating packet routing information; and

a communication system configured to receive a user communication for the call and the control message, and in response, convert the user communication into a packet format including the packet routing information selected by the processing system and transfer the user communication in the packet format to a packet system that routes the user communication based on the packet routing information selected by the processing system.

2. The communication system of claim 1 wherein the packet routing information comprises an address.

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3. The communication system of claim 1 wherein the packet routing information indicates a virtual connection.

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4. The communication system of claim 1 wherein the packet routing information comprises a network code representing a network element to egress the call from the packet system.

5. The communication system of claim 1 wherein:

the processing system is configured to process another one of an SS7 signaling message  
and a Q.931 signaling message for the call to transfer another control message indicating call  
5 termination; and

the communication system is configured to receive the other control message and  
responsively terminate the call.

6. The communication system of claim 1 wherein the processing system is configured to access  
10 a Service Control Point (SCP) based on the signaling message to select the packet routing  
information.

7. The communication system of claim 1 wherein the processing system is configured to  
generate and transfer billing information for the call.

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8. The communication system of claim 1 wherein the communication system is configured to  
receive the user communication for the call in a Time Division Multiplex (TDM) format.

9. The communication system of claim 1 wherein the communication system is configured to  
20 receive the user communication for the call in a DS0 format.

10. The communication system of claim 1 wherein the processing system is external to the  
communication system.

11. A method of operating a communication network, the method comprising:
- in a processing system, processing one of a Signaling System #7 (SS7) signaling message and a Q.931 signaling message for a call to select packet routing information for the call and transferring a control message indicating packet routing information; and
- 5 in a communication system, receiving a user communication for the call and the control message, and in response, converting the user communication into a packet format including the packet routing information selected by the processing system and transferring the user communication in the packet format to a packet system that routes the user communication based on the packet routing information selected by the processing system.

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12. The method of claim 11 wherein the packet routing information comprises an address.
13. The method of claim 11 wherein the packet routing information indicates a virtual connection.

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14. The method of claim 11 wherein the packet routing information comprises a network code representing a network element to egress the call from the packet system.

15. The method of claim 11 further comprising:

20 in the processing system, processing another one of an SS7 signaling message and a Q.931 signaling message for the call and responsively transferring another control message indicating call termination; and

in the communication system, receiving the other control message and responsively terminating the call.

16. The method of claim 11 further comprising, in the processing system, accessing a Service

5 Control Point (SCP) based on the signaling message to select the packet routing information.

17. The method of claim 11 further comprising, in the processing system, generating and

transferring billing information for the call.

10 18. The method of claim 11 wherein receiving the user communication for the call comprises

receiving the user communication in a Time Division Multiplex (TDM) format.

19. The method of claim 11 wherein receiving the user communication for the call comprises

receiving the user communication in a DS0 format.

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20. The method of claim 11 wherein the processing system is external to the communication

system.